Xcel Energy/NSP Comments NPL Characteristics Data Collection Form Ashland/Northern States Power Lakefront Ashland, Wisconsin

January 30, 2001

The following comments have been developed for purposes of providing Xcel Energy/NSP's position (Xcel) with regard to statements in the NPL scoring document that it believes are misstatements and errors of fact. The specific citation is referenced by Section and Page Number, followed by the actual cite (if needed), which in turn is followed by Xcel's formal comment, in bold type.

1. Section 1. Basic Identifying Information, Item 1.1, page 1.

The site name according to the Wisconsin Department of Natural Resources (WDNR) is The Ashland/Northern States Power Lakefront Site

2. Section 1. Basic Identifying Information, Item 1.8, How Initially Identified, page 1.

Xcel understands that the initial identification of the site to the USEPA was through a Citizen complaint, not through a State/local program.

3. Section 4. Waste Description, Item 4.2, Entity that Generated The Waste

While Xcel acknowledges that wood/ lumber treatment is identified as a source under the recycling activity, it would seem more appropriate that the box denoting "Wood preserving /treatment" would have been checked under the manufacturing category.

4. Section 6. Water Use, Item 6.4, Depth to Aquifer, page 10.

The approximate depth from the ground surface to the uppermost usable aquifer, the Copper Falls, is between 10 and 25 feet, at the shallowest depth near MW-7 at the Lakefront. The shallow aquifer in the fill and the ravine cannot be considered usable for drinking water and other beneficial uses.

5. Section 8. Response Actions, Item 8.1, Type of Response Action, page 12.

In 2000, Xcel installed a coal tar/DNAPL removal system on its property for product removal and aquifer improvement of the Copper Falls aquifer. Although the document is clear in that it does not consider groundwater impacts for the scoring, it should be recognized that the Copper Falls aquifer

is one of the affected operable units. This fact is important as will be noted later.

6. Ashland/Northern States Power Documentation Record, references to HRS Documentation Record, page 7, reference 22.

Xcel questions this reference. Operating information from the MGP was provided to the WDNR in the forms of copies of ledger entries for gas production and tar production data (when available) for the specific years mentioned in this reference. Annual reports for the MGP during these years did not contain this information except for two years (1932 and 1933) not cited for this reference. It is also noted that this reference should also include Brown's directories, other operating reports, and street and railcar commission reports.

7. Documentation Record, Site Overview, page 9

At the end of the third paragraph in the overview and again in a couple of later sections in the scoring package, the record discusses a pipe noted on a historic drawing with the caption "2" to abandon tar dump." In order to accurately complete the record regarding this pipe, the overview should report that a pipe in that location was found and examined during the investigation. However, a forensic examination of that pipe concluded that particular pipe did not contain any hydrocarbon residues indicating it was not used to transport tar north from the MGP plant. The forensic report concerning this pipe is available upon request.

Prior to the NPL process, Xcel was engaged in many discussions with the WDNR about a separate source of contamination at the Lakefront, besides the former MGP. Specifically, this separate source was from wood treatment operations by the John Schroeder Lumber Company. The Data Collection form recognizes former wood treatment in Section 3, Item 3.1 and Section 4, Item 4.2. This Overview subsection mentions two sources of contaminants, one in the sediments and one resulting from the former MGP. For consistency with the Data Collection form, this Overview should also mention wood treatment as a source contributing to the contamination in Chequamegon Bay.

Similarly and again to be consistent with the Data Collection form in Sections 3.1 and 3.2, the Site Overview should acknowledge the municipal landfill as another source contributing to the contamination in the Bay.

8. Documentation Record, Site Overview, page 10

The City of Ashland first encountered contamination at the lakefront when it investigated the area for possible expansion of the then operating POTW in 1989, not 1980.

Xcel takes strong exception to the final statement of the Site Overview on page 10 which reads "The landfilled area at the Ashland Lakefront/Kreher Park and the former ravine have been identified as sources contributing to the contamination in Chequamegon Bay." To date there is no physical evidence linking the contamination in the ravine fill to the contamination encountered in the Bay. Furthermore, and quite to the contrary, a recent fingerprinting study performed by the Gas Technology Institute (GTI, formerly the Institute of Gas Technology) concluded that the tarry materials found in the Bay sediments are substantially dissimilar to the materials found at Xcel's former MGP site. GTI found, however, that the Bay sediment samples are highly similar to the tarry materials found in Kreher Park, the site of the former lumber yard known for treating wood and the municipal landfill. Attached is the GTI report entitled Comparative Analysis of Sediment Samples from the Chequamegon Bay Near the Kreher Park Shoreline, Ashland Wisconsin.

9. Documentation Record, Section 2.2, Source Characterization, page 12.

The last sentence of the first paragraph states "The plant reportedly produced gas by coal carbonization until approximately 1920, when (it)...converted to a carburetted water gas process (Ref. 5, pages ES-1, 1)." This is a correct reference to a 1995 Dames & Moore report. However, subsequent Dames & Moore documents (e.g., ref. 17) indicate updated research showing the plant had always produced water gas; coal gas production was reported for only one portion of one year (1917). This finding is consistent with forensic research on samples of tar from the Xcel site indicating a water gas source (see Comment 14).

In the second paragraph, it is stated that "No record exists on the waste disposal methods used by the facility." This statement is not entirely true, and it ignores the fact that tars were generally considered a valuable byproduct of gas manufacture rather than being a "waste." The records indicate that some tars were sold to third parties and some of the tars were burned for energy recovery. This issue will be further discussed in succeeding Comment 12.

10. Documentation Record, Section 2.2, Source Characterization, Subsection 2.2.1, Source Identification, page 12, third paragraph.

The ravine was filled by 1909, according to Sanborn Fire Insurance maps of the vicinity, not 1923.

11. Documentation Record, Section 2.2, Source Characterization, Subsection 2.2.1, Source Identification, page 13, second paragraph.

The 1999 Supplemental Investigation Report referenced in this paragraph identifies free product DNAPL thickness in wells MW-13, MW-9 and MW-15 screened within the ravine fill at no more than approximately two (2) feet. Wells MW-13A and MW-13B, screened within the deep Copper Falls aquifer, separated from the ravine fill by more than 15 feet of the Miller Creek aquitard, yielded free product DNAPL thicknesses greater than 20 feet.

12. Documentation Record, Section 2.2, Source Characterization, Subsection 2.2.1, Source Identification-Xcel is unclear whether this a new Subsection 2.2.1, but subsequent numbers would indicate so, page 21, third paragraph

Xcel questions the source of the statement "Facility records, where available, indicate that coal tar was not segregated for recovery from the wastewater or other streams until 1939. From 1939 to 1947, some tar was collected for sale (Ref. 5, page 1; Ref. 22, pages 1...127)" Xcel's concern is again for reference 22. There are records of tar sales for years 1939, 1941 and 1944, but no others. However, there are no records of the disposition of wastewater streams, or the separation of tar from those streams. It is erroneous to conclude that the lack of tar sales records before 1939 is an indication that the tar was not recovered for sale or other purposes (such as boiler fuel) prior to that date. The correct conclusion is that no records are available.

This again causes Xcel to question ref. 22. Annual reports available from the time the MGP was in operation are only several pages thick. Xcel questions the specific page numbering of these reports as referenced. As mentioned in Comment 6., gas and tar production data were obtained from copies of ledger entries filed with the Railroad Commission (now the Public Services Commission). Many of these entries were blank, indicating this information was not recorded. This lack of data cannot lead one to conclude what the actual operations encompassed.

13. Documentation Record, Section 2.2, Source Characterization, <u>Attribution</u>, page 37, second paragraph.

In the first paragraph it is stated that "Eyewitness accounts indicate that open tar creosote pits may have been located south of the present waste water treatment plant ..." Xcel requests that the record be corrected to note the eyewitness accounts emphatically state that the creosote pits were located not "may have been located."

The statement "Records indicate that the residual MGP wastes were not collected from the plant start-up (1880's) through 1938 (Ref. 22, pages 1...127)." Xcel objects to this statement as a mischaracterization. As stated

in the previous comment, no information on plant operations is available from the Railroad Commission with the level of detail implied in this statement.

14. Documentation Record, Section 2.2, Source Characterization, Attribution, page 38, second paragraph.

The statement "Contamination in soil and groundwater in both the Ashland Lakefront/Kreher Park and the former ravine indicates that the former ravine may be a conduit for contamination onto the Ashland Lakefront/Kreher Park (Ref. 5...Ref. 6...)." Ref. 5 is a 1995 Dames & Moore report that indicates the ravine is a potential source of groundwater contamination to Kreher Park, since dissolved product in groundwater is the only contaminant source that can migrate from the ravine to Kreher Park. It should also be noted that latter investigation shows that only low levels of contaminants were migrating through this groundwater pathway. Ref. 6 is a 1995 SEH document making the claim that the MGP is the source of contamination at the Lakefront. Work performed by Dames & Moore/URS as well as SEH subsequent to these 1995 documents identify separate sources. including wood treatment operations and the City landfill. In addition, forensic analysis performed by the Gas Technology Institute (GTI) on samples of coal tar/DNAPL collected from the Xcel property indicate a signature characteristic of carburetted water gas tar. Reference is made to the report entitled Comparative Analysis of NAPL Residues from the NSP Ashland Former MGP Site and the Ashland Lakefront Property (Kreher Park) which will be provided upon request. Similar product samples collected from the seep area at Kreher Park and the bay sediments show a much different signature, not comparable to carburetted water gas tar. Consequently, the best information currently available refutes the conclusion that the ravine is the source of contamination at Kreher Park and the bay sediments. Reference is made to the attached GTI report and earlier Comment 8.

15. Documentation Record, Section 2.2, Source Characterization, <u>Attribution</u>, page 38, third paragraph.

Xcel disputes the statement "Sediment contamination in Chequamegon Bay is attributed to the coal tar from the manufactured gas plant that operated on the NSP property," for the reasons stated in Comments 8 and 14. It is further noted that this statement is inconsistent with the responses given earlier in the scoring package, specifically Section 4.2 in which wood/lumber treatment is identified as a entity that generated the waste.

16. Section 4.0 SURFACE WATER MIGRATION PATHWAY, under 4.1.1.1., page 32

In the first paragraph of this section it is stated that "A seep at the mouth of the former ravine is located where the ravine originally discharged to Chequamegon Bay before the filling in of the ravine and the Ashland Lakefront." This statement is incorrect since a hydrogeologic study of the site by SHE demonstrated that the seep in Kreher Park is at least three feet higher than the water table in the immediate vicinity of the seep. This indicates the source of the seep is likely to be a cultural artifact, such as a buried culvert.